ISSN:2372-0743 print
ISSN:2373-2989 on line
International Journal of Ground Sediment & Water
Vol. 15
2022

◆Research Paper

DOI: 10.5281/zenodo.5767438

Contribution of Hydroponic Feed for Livestock Production and Productivity: A Review

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Abstract: Production of hydroponics fodder involves growing plants without soil but in water or nutrient-rich solutions in a greenhouse for a short duration (approx. 7 days). The use of nutrient solutions for the growth of hydroponic fodder is not essential, and only tap water can be used. The hydroponics fodder is more palatable, digestible, and nutritious while imparting other health benefits to the animals. Feeding hydroponically produced fodder increases the digestibility of the nutrients in the ration, which could increase milk production. In situations where conventional green fodder cannot be grown successfully, farmers can produce hydroponic fodder for feeding their dairy animals using low-cost devices. Nowadays, several countries are practicing it for their sustainable livestock production. Developing seed culture and new activities in hydroponics reduce production costs and help cooperatives produce and sell. Thus, it is vital to use hydroponic fodder for livestock, which is low cost and highly nutritive. Therefore, this technology is found to be conducive to almost all livestock. Hydroponic feed is a natural product produced without the use of any hormones, growth promoters, or chemical fertilizers. There is no pesticide,

fungicide, dust, or toxic that could contaminate livestock products. This technology has a solution to avoid the scarcity of green feed in dry seasons and urban areas with a shortage of forage production. Therefore, there is a need to develop specific low-cost devices to produce hydroponics fodder under given local conditions. So further studies and development efforts should be made to expand its applications is needed.

Keywords: Hydroponic, Fodder, Livestock, Production, and Productivity.

This paper DOI: 10.5281/zenodo.5767438